

AMENDMENTS TO THE CLAIMS

Claims 1-20 (Cancelled).

21. (Previously Presented) A plate heat exchanger comprising:

- a pair of end plates;
- a plurality of first passageway plates each having a first passageway defined therein;
- a plurality of second passageway plates each having a second passageway defined therein;
- a plurality of partition plates, said plurality of first passageway plates and said plurality of second passageway plates being stacked in an alternating manner with one of said plurality of partition plates interposed between each adjacent first passageway plate and second passageway plate, and said first passageway of each of said first passageway plates and said second passageway of each of said second passageway plates being aligned, whereby a first fluid flowing through said first passageway of each of said first passageway plates flows in a manner that is countercurrent to a flow of a second fluid flowing through said second passageway of each of said second passageway plates; and
- a partition member arranged in only said first passageway of each of said first passageway plates so as to divide said first passageway into two sections with respect to a widthwise direction of said first passageway.

Claim 22 (Cancelled).

23. (Previously Presented) The plate heat exchanger of claim 21, wherein each of said partition plates has a thickness greater than a thickness of any one of said first passageway plates and said second passageway plates.

24. (Previously Presented) The plate heat exchanger of claim 23, wherein said first passageway of each of said first passageway plates and said second passageway of each of said second passageway plates have generally U-shaped turning portions.

25. (Previously Presented) The plate heat exchanger of claim 21, wherein said first passageway of each of said first passageway plates and said second passageway of each of said second passageway plates have generally U-shaped turning portions.

26. (Previously Presented) The plate heat exchanger of claim 25, wherein each of said first passageway plates, said second passageway plates, and said partition plates has a plurality of header through-holes formed therein and arranged so as to form an inlet header and an outlet header in said plate heat exchanger.

Claims 27-38 (Cancelled).

39. (Currently Amended) ~~The method of claim 27;~~ A method of making a plate heat exchanger, comprising:

shaping a plurality of plates by pressing to form openings through each of the plates, said pressing comprising pressing against a first surface of each of the plates toward a second surface of each of the plates;

coating solder paste on the first surface of each of the plates;

stacking the plates immediately adjacent to each other so that the second surface of each plate does not adjoin the second surface of an adjacent plate, whereby the plates are oriented in the same direction with respect to the first surface and the second surface of each of the plates; and

heating the plates while holding the plates in close contact with each other;

wherein said shaping of the plates comprises forming a group of first passageway plates, a group of second passageway plates, and a group of partition plates, wherein the

openings formed in the group of first passageway plates comprise first passageways and through-holes, the openings formed in the group of second passageway plates comprise second passageways and through-holes, and the openings formed in the group of partition plates comprise through-holes.

40. (Previously Presented) The method of claim 39, wherein said stacking of the plates comprises stacking the plates in an alternating manner so that one of the group of partition plates is interposed between each adjacent first passageway plate and second passageway plate.

41. (Currently Amended) ~~The method of claim 27,~~ A method of making a plate heat exchanger, comprising:

shaping a plurality of plates by pressing to form openings through each of the plates, said pressing comprising pressing against a first surface of each of the plates toward a second surface of each of the plates;

coating solder paste on the first surface of each of the plates;

stacking the plates immediately adjacent to each other so that the second surface of each plate does not adjoin the second surface of an adjacent plate, whereby the plates are oriented in the same direction with respect to the first surface and the second surface of each of the plates; and

heating the plates while holding the plates in close contact with each other;

wherein the plurality of plates includes at least three plates, including a first passageway plate, a second passageway plate, and a partition plate, wherein said stacking of the plates comprises stacking the plates so that the partition plate is located between the first passageway plate and the second passageway plate, and so that a second surface of the first passageway plate adjoins a first surface of said partition plate, and a second surface of the partition plate adjoins a first surface of the second passageway plate.

42. (Previously Presented) The method of claim 41, wherein the openings through the first passageway plate comprise a first passageway and through-holes, the openings through the second passageway plate comprise a second passageway and through-holes, and the openings in the partition plate comprise through-holes.

Claims 43 and 44 (Cancelled).